

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 29

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte HORACE L. WINGFIELD and DAVID R. DILLEHAY

Appeal No. 1996-0796
Application 08/097,662¹

ON BRIEF

Before GARRIS, PAK, and PAWLIKOWSKI, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134
from the examiner's final rejection of claims 1, 3, 4 and 6
through 20, which are all of the claims pending in the above-

¹ Application for patent filed July 26, 1993.

Appeal No. 1996-0796
Application No. 08/097,662

identified

application. Subsequent to the final Office action dated June 24, 1994, Paper No. 8, claims 2 and 5 were canceled. See the Rule 1.116 Amendment entered August 1, 1994, Paper No. 9.

Claim 1 is representative of the subject matter on appeal and reads as follows:

1. A closed bomb device for measuring performance properties of energetic materials comprising a body and a ceramic liner, said ceramic liner having a thermal conductivity lower than about 8 BTU inch/hour@F@ft².

In support of his rejection, the examiner relies on the following prior art references:

Nakamura et al. (Nakamura) 4,419,971 Dec. 13,
1983

Hartsock 4,524,498 Jun. 25,
1985

Dillehay, D. R. (Dillehay), "Closed Bomb Testing at Longhorn Army Ammunition Plant," Thiokol Corp., 1986, pp. 107-122.

Claims 1, 3, 4 and 6 through 20 stand rejected under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Dillehay and either Nakamura or Hartsock.

We reverse.

To establish a *prima facie* case of obviousness within the meaning of 35 U.S.C. § 103, the examiner must demonstrate that one of ordinary skill in the art would have found both a suggestion to build the here claimed device and a reasonable expectation of successfully doing so in the prior art. ***In re Vaeck***, 947 F.2d 488, 483, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991). In other words, the examiner bears the initial burden of supplying the factual basis to establish the above-mentioned suggestion and reasonable expectation of success to render the claimed subject matter *prima facie* obvious. ***In re Warner***, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968).

To carry this initial burden under Section 103, the examiner relies on the combined teachings of Dillehay and either Nakamura or Hartsock. See Answer, page 3. The examiner takes the position that it would have been obvious to substitute the silicone rubber liner employed in a closed bomb device described in Dillehay with the ceramic liner described in Nakamura or Hartsock. See Answer, page 5. According to the examiner (Answer, page 4), the ceramic and the silicone

rubber liners are functionally equivalent.

On this record, we do not agree with the examiner that it would have *prima facie* obvious to substitute the silicone rubber liner used in a closed bomb device with the ceramic liner described in Nakamura or Hartsock. As acknowledged by the examiner (Answer, page 4), both Nakamura and Hartsock are directed to using a ceramic liner in an internal combustion engine, rather than a closed bomb device. Both Nakamura and Hartsock do not teach that the ceramic liner is useful for a closed bomb device. See Nakamura and Hartsock in their entirety. Nor do they teach that the ceramic liner is equivalent to the silicone rubber liner. *Id.* Although the examiner recognizes that both a closed bomb device and an internal combustion engine involve combustion, the examiner has not demonstrated that the conditions under which a closed bomb device are subjected are identical or substantially identical to those of an internal combustion engine. See Answer in its entirety. The examiner simply fails to prove that the ceramic liner, useful for an internal combustion

engine, is likewise useful for a closed bomb device.

In reaching this conclusion, we note that both the ceramic and the silicone rubber are "functionally equivalent" in that they are useful as liners and insulation. However, that fact alone is not sufficient to establish a *prima facie* case of obviousness. ***In re Edge***, 359 F.2d 896, 899, 149 USPQ 556, 557 (CCPA 1966). The examiner must demonstrate that the applied prior art references as a whole provide the requisite suggestion

and reasonable expectation of success to employ a ceramic liner in a closed bomb device. For the reasons indicated *supra*, we conclude that the examiner simply has not carried his burden in establishing a *prima facie* case of obviousness regarding the claimed subject matter.² Accordingly, we

² Appellants ask us to consider a declaration which was not entered by the examiner. We need not consider the declaration for two reasons. First, since the examiner has not established a *prima facie* case, we need not consider the sufficiency of the declaration relied upon by appellants. Second, since the declaration is not part of the record, we cannot consider it in determining the propriety of the examiner's rejection. If the examiner does not approve entry of the declaration proffered by appellants, their remedy is via a petition to the Commissioner of the U.S. Patent and Trademark

Appeal No. 1996-0796
Application No. 08/097,662

reverse the examiner's decision rejecting all of the appealed
claims under 35 U.S.C.

§ 103.

REVERSED

BRADLEY R. GARRIS)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
CHUNG K. PAK)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
)	
BEVERLY PAWLIKOWSKI)	
Administrative Patent Judge)	

CKP:vsh

Office.

Appeal No. 1996-0796
Application No. 08/097,662

SULLIVAN LAW GROUP
5060 NORTH 40TH STREET
SUITE 120
PHOENIX, AZ 85018-2148